



BORIIS (Biota of Rhode Island Information System): Rhode Island's Biodiversity Data Collaborative

Rhode Island Natural History Survey

Shortly after its founding, in 1994, RINHS began building a database with the goal of listing every species of organism known to occur in Rhode Island. Entries came from RINHS's Biota of Rhode Island publication series, its members and partners, and its field projects. In 2002, RINHS combined its data with data on rare species from the RI Natural Heritage Program (an RI DEM office created in 1978 through a collaboration with The Nature Conservancy). RINHS also began data mining in publications, museums, and other datasets and through data exchanges with other organizations. The result is an entirely new database, the ***Biota of Rhode Island***, to document through time the distribution and viability of animals, plants, and natural communities in Rhode Island. Its development has been supported by the RI office of The Nature Conservancy (TNC), the University of RI College of the Environment and Life Sciences (URI-CELS), the RI Foundation, and the Champlin Foundations, among others.

The Biota of Rhode Island uses a highly customized MS Access database, coupled with ArcGIS capability, to track over 10,000 species (including 511 RI Natural Heritage Program species and 364 GCN species) using over 75,000 evidentiary records (voucher specimens, observations, literature citations). It also can track natural communities: in partnership with RI DEM and TNC, RINHS incorporated information on 101 natural communities identified in the *Natural Communities of RI* (Lundgren and Enser 2002), the 64 CWCS Key Habitats, and other frequently encountered community classification schema.

RINHS's goals for the Biota of Rhode Island are: a) to get this wealth of information into the hands of partners willing to help support the cost of its management, and b) to encourage those same partners and others to use Biota of Rhode Island as a central biodiversity data repository, something that has been called for in the past and would greatly benefit everyone working on environmental planning and management. To achieve these goals, RINHS is exploring the development of statewide biodiversity data collaborative who's members would have secure two-way web access to the Biota of Rhode Island. Collectively, the Biota of Rhode Island database, the collaborative partner groups, and the multi-user access system will be known as ***BORIIS (Biota of Rhode Island Information System)***.

In the BORIIS collaborative, RINHS will actively manage the underlying Biota of Rhode Island database, adding substantial value to any contributed data through QA/QC protocols, scientific steering committees, software upgrades, custom data tools, proactive data mining and data exchanges, taxonomic review, channels for public input, and outreach and education. RINHS will also maintain the software and hardware that allows each partner to have two-way communication with the database. To participate, each partner must contribute to the cost of data management and also commit to use BORIIS to manage biodiversity data generated through their own activities. The cost to a partner will be much less than acquiring comparable capability on its own and BORIIS's huge

underlying dataset and unique capabilities will improve partners' results and save time and money over alternative, ad hoc data management they may already be doing.

RINHS is an ideal party to convene the BORIIS collaborative. As an independent, non-profit, non-regulatory, explicitly non-advocacy, organization with a membership that includes environmental organizations, scientists, and natural historians, it can work easily with a wide range of stakeholders, including grassroots groups and individuals. As part of its mission, it maintains active contact with a network of organizations, agencies, researchers, and naturalists. It is the exclusive NatureServe data cooperator for Rhode Island. It actively collaborates with outside organizations such as the Invasive Plant Atlas of New England and the New England Wildflower Society to collect data on species and communities.